

Application No. 10/581,884  
 Amendment dated July 26, 2010  
 After Final Office Action of March 26, 2010

Docket No.: 13111-00043-US1

### AMENDMENTS TO THE CLAIMS

The following Listing of Claims replaces all previous listings of claims in this application. Please cancel claims 38-42 and 44 without prejudice or disclaimer.

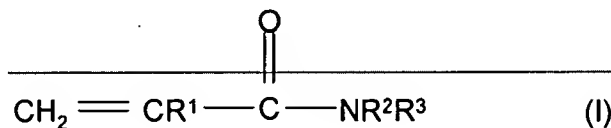
#### Listing of Claims:

1 - 32. (Canceled)

33. (Currently amended) A ~~hair spray~~ hairspray composition comprising

A) at least one copolymer obtained by free radical polymerization of a monomer mixture ~~comprising~~ consisting of:

- a) ~~tert-butyl acrylate and, optionally, tert-butyl methacrylate,~~
- b) ~~at least one  $\alpha,\beta$ -ethylenically unsaturated amide-containing compound of the formula I~~



\_\_\_\_\_ where

\_\_\_\_\_  $\text{R}^1$  \_\_\_\_\_ is H or  $\text{C}_1$ - $\text{C}_4$ -alkyl;

\_\_\_\_\_  $\text{R}^2$  and  $\text{R}^3$ , independently of one another, are H or  $\text{C}_1$ - $\text{C}_4$ -alkyl or  $\text{R}^2$  and  $\text{R}^3$  together with the nitrogen atom to which they are bonded may also be a 4- to 7-membered heterocycle;

\_\_\_\_\_ with the proviso that the sum of the carbon atoms of the radicals  $\text{R}^1$ ,  $\text{R}^2$  and  $\text{R}^3$  is not more than 4, and methacrylamide and/or N-(tert-butyl)acrylamide,

- c) acrylic acid, and

d) optionally, methacrylic acid, and

e) optionally, N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)-propyl]methacrylamide or N-vinylimidazole, and

B) at least one cosmetically or pharmaceutically acceptable carrier.

34. (Currently amended) The hairspray composition according to claim 33, wherein component b) is selected from the group consisting of acrylamide, methacrylamide, N-methyl(meth)acrylamide, N-ethyl(meth)acrylamide, N-propyl(meth)acrylamide, N-(n-butyl)acrylamide, N-(sec-butyl)acrylamide, N-(tert-butyl)acrylamide, N,N-dimethyl(meth)acrylamide, N,N-diethylacrylamide, N-acryloylmorpholine, N-acryloylpiperazine, N-(meth)acryloylpyrrolidine and mixtures thereof.

35. (Currently amended) The hairspray composition according to claim 33, wherein the component b) comprises methacrylamide and/or is N-(tert-butyl)acrylamide or consists of methacrylamide and/or N-(tert-butyl)acrylamide.

36. (Currently amended) The hairspray composition according to claim 33, further comprising wherein the monomer mixture comprises methacrylic acid incorporated in the form of polymerized units as component d).

37. (Currently amended) The hairspray composition according to claim 33, further comprising component e), incorporated in the form of polymerized units, at least one compound having an  $\alpha,\beta$ -ethylenically unsaturated double bond capable of free radical polymerization and at least one cationogenic and/or cationic group per molecule N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]methacrylamide or N-vinylimidazole.

38-42. (Canceled)

43. (Withdrawn) The composition according to claim 33, which comprises, incorporated in the form of polymerized units,

- from 30 to 90 % by weight of at least one compound a),
- from 3 to 50 % by weight of at least one compound b),
- from 5 to 40 % by weight of acrylic acid c),
- from 0 to 25 % by weight of methacrylic acid d),
- from 0 to 25 % by weight of at least one compound e),
- from 0 to 25 % by weight of at least one compound f),
- from 0 to 5 % by weight of at least one crosslinking agent g).

44. (Canceled)

45. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide,
- acrylic acid and
- methacrylic acid.

46. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate,
- N-acryloylmorpholine or N,N-dimethylacrylamide and
- acrylic acid.

47. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide,
- N-vinylpyrrolidone and
- acrylic acid.

48. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide,
- N-vinylpyrrolidone,
- acrylic acid and

- methacrylic acid.

49. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate,
- tert-butyl methacrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide and
- acrylic acid.

50. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate,
- tert-butyl methacrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide,
- acrylic acid and
- methacrylic acid.

51. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate and/or tert-butyl methacrylate,

- methacrylamide and/or N-(tert-butyl)acrylamide,
- acrylic acid and
- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)-propyl]methacrylamide or N-vinylimidazole.

52. (Withdrawn) The hairspray composition according to claim 33, which consists of repeating units of

- tert-butyl acrylate and/or tert-butyl methacrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide,
- acrylic acid,
- methacrylic acid and
- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N-vinylimidazole.

53. (Withdrawn) The hairspray composition according to claim 33, which comprises, incorporated in the form of polymerized units,

- a) tert-butyl acrylate and/or tert-butyl methacrylate,
- b) methacrylamide and/or N-(tert-butyl)acrylamide,
- c) acrylic acid and
- f) at least one compound which is selected from C<sub>1</sub>-C<sub>3</sub>-alkyl methacrylates, hydroxy-C<sub>1</sub>-C<sub>3</sub>-alkyl methacrylates and mixtures thereof,

with the proviso that the proportion by weight of component a) is equal to or greater than the proportion by weight of component f).

54. (Withdrawn) The hairspray composition according to claim 53, which consists of repeating units of

- tert-butyl acrylate,
- methacrylamide and/or N-(tert-butyl)acrylamide,
- acrylic acid
- methacrylic acid and
- ethyl methacrylate.

55. (Withdrawn) The hairspray composition according to claim 33, which comprises, based in each case on the total weight of the monomers used for the polymerization,

- from 40 to 80% by weight of tert-butyl acrylate and ethyl methacrylate, with the proviso that the proportion by weight of tert-butyl methacrylate is equal to or greater than the proportion by weight of ethyl methacrylate,

- from 5 to 30% by weight of methacrylamide and/or N-(tert-butyl)acrylamide,

- from 5 to 30% by weight of acrylic acid and

- from 0 to 25% by weight of methacrylic acid,

incorporated in the form of polymerized units.

56. (Previously presented) The hairspray composition according to claim 33, wherein the component B) is selected from

- i) water,
  - ii) water-miscible organic solvents,
  - iii) oils, fats, waxes,
  - iv) esters of C<sub>6</sub>-C<sub>30</sub>-monocarboxylic acids with monohydric, dihydric or trihydric alcohols, which esters differ from iii),
  - v) saturated acyclic and cyclic hydrocarbons,
  - vi) fatty acids,
  - vii) fatty alcohols,
  - viii) propellants
- and mixtures thereof.

57. (Previously presented) The hairspray composition according to claim 33, comprising at least one additive which differs from the components A) and B) and is selected from the group consisting of cosmetically active substances, emulsifiers, surfactants, preservatives, perfume oils, thickeners, hair polymers, hair and skin conditioners, graft polymers, water-soluble or dispersible silicone-containing polymers, light stabilizers, bleaches, gel formers, care compositions, colorants, tinting compositions, tanning compositions, dyes, pigments, consistency agents, humidifiers, refatting agents, collagen, protein hydrolysis products, lipids, antioxidants, antifoams, antistatic agents, emollients and softeners.



58-59. (Canceled)

60. (Previously presented) The hairspray composition according to claim 33, wherein the composition is a hair setting composition and/or a conditioner.

61-67. (Canceled)